

Sub A7 brow

An information source monitor device for monitoring data files having a hyperlink to other computers interconnected by a network, at a client computer, comprising:

- a reference information storing means for storing URL (Uniform Resource Locator) information of a data file accessed by the client computer; and
- a counting means for counting the number of references to obtain a total number of references made for each referring URL.

2. The information source monitor device in claim 1,

wherein said information source monitor device is incorporated into the client computer.

3. The information source monitor device in claim 2,

wherein said information source monitor device is constructed as a part of a browser software on the client computer.

4. The information source monitor device in claim 1,

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4. The information source monitor

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4. The information source monitor

wherein said information source monitor is incorporated into the client computer.

3. The information source monitor of claim 2, wherein said information source monitor is constructed as a part of a browser computer.

4. The information source monitor

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in claim 2,  
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ter.

4. The information source monitor

wherein said information source monitored and controlled the operation of the computer as a part of a browser computer.

4. The information source monitor

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wherein said information source monitor device is positioned at a relay point between the server computers and the client computer.

6. The information source monitor device as set forth in claim 5,

wherein said reference information extracting means extracts a data type of a data file from a response header which is issued by the server computer when the client computer accessed the data file on the server computer.

7. The information source monitor device as set forth in claim 6, further comprising sorting means for counting the reference information according to data types to find a total number of times reference was made to each referring URL.

9. The information source monitor device as set forth in claim 1,

10. The information source monitor device as set forth in claim 1, further comprising:

information updating means for updating data files at referring URLs and data files linked to the data files at the referring URLs at a predetermined link level in the cache at predetermined time intervals according to a counting result of the reference information by accessing a corresponding server computer.

11. The information source monitor device as set

12. An information source monitoring method for use in browsing data files having a hyperlink structure on server computers interconnected by a network through a client computer, comprising the steps of:

counting the reference information to find a total number of times reference was made to each referring URL.

a program for enabling a computer to execute storing of a referring URL that referred to a data file accessed by the client computer as reference information, and counting of the reference information to find a total number of times reference was made to each referring URL.

(a) allotting an index of importance to a referring address that referred to a file object accessed by the client computer according to a referred frequency of the file object;

(c) when updates of the file objects are detected, displaying the referring addresses of the file objects in order of the index of importance.

wherein said step (b) includes the step of detecting appearance of a new hyperlink, and

when the appearance of the new hyperlink is detected, a display element to which the new hyperlink is attached is displayed together with the referring address in such a state that a hyperlink is attached to a corresponding file object.

wherein when a changed display element consists only of an image file, a hyperlink attached to the image file is regarded as a new hyperlink only if the address of the hyperlink attached to the image file is judged no longer than a predetermined length.

wherein said step (b) includes the step of detecting changes in display elements to which the same hyperlink is attached, and

18. The network information display method as set forth in claim 14,

when the number of the referring addresses of updated file objects to be displayed exceeds the upper

19. The network information display method as set forth in claim 14,

20. The network information display method as set forth in claim 14,

21. The network information display method as set forth in claim 14,

wherein the allotment of the index\ of importance

22. The network information display method as set forth in claim 14,

23. A storage medium storing as a computer-readable program a network information display method for selectively displaying proposed access points when browsing file objects having a hyperlink structure on server computers interconnected by a network through a client computer, said method comprising the steps of:

(b) detecting whether file objects which were accessed by the client computer in a past have been updated on the server computers; and

(c) when updates of the file objects are detected, displaying the referring addresses of the file objects in order of the index of importance.



